

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 75-7537

Exam Date: 8/8/2012

1. Current Owner: BILL GATTUNG
88 LOIS LN
SALMON ID 83467
(208)756-3704
2. Accompanied by: Jana Gattung
Phone No: 208.756.3704
Address: 88 Lois Lane
Relationship to Permit Holder: Bill's daughter and the current land owner
3. SOURCE TRIBUTARY
WILLIAMS CREEK SALMON RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: none
2. Other water rights with the same point of diversion: none

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

WILLIAMS CREEK L9 SE1/4NW1/4 Sec. 7, Twp 20N, Rge 22E, B.M. LEMHI County

Method of Determination: GPS and visual inspection

2.

<u>PLACE OF USE:</u>			RECREATION STORAGE																
Twp	Rge	Sec	NE				NW				SW				SE				
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>Totals</u>
20N	22E	7							X	X									
									L 2	L 9									

Method of Determination: GIS Mapping and Visual Inspection.

3. YES Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
YES Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
YES Aerial Photo Attached
YES Photo of Diversion and System Attached

4. none

<u>Well or Diversion</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
<u>ID No.*</u>					

D. FLOW MEASUREMENTS

1. None taken

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
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2. Measurements:

E. FLOW CALCULATIONS

none Additional Computation Sheets Attached

Measured Method: None

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: n/a

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = n/a$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = n/a$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = n/a$$

2. Volume Calculations for Other Uses:

Pond area (determined using NAIP and GIS) 2.4 acres

Average depth 10 feet

Reservoir capacity for V shaped reservoirs

Surface Area X Maximum Depth X 0.4 = Capacity

$$2.4 \times 10 \times 0.4 = 9.6$$

Evaporation Loss Calculation 3.8 AFA

(see attached sheet)

Seepage Loss Calculation 4.2 AFA

(see attached sheet)

$$9.6 (\text{pond volume}) + 3.8 (\text{evaporation loss}) + 43.8 (\text{seepage loss}) = 57.2 \text{ AF}$$

Permit volume 15.0

Recommended volume: 15.0 AFA

G. NARRATIVE/REMARKS/COMMENTS

A 2.4 acre pond provides recreation storage in T20N R21E Section 7 SENW. Williams Creek flows south out of a canyon to the headgate that controls flow for water right 75-7588. Below the headgate water from Williams Creek converges with Gattung Slough and water flows .6 of a mile to the upper end of the pond. The pond itself was excavated within the Williams Creek channel and was designed for the creek to flow through. Downstream from the pond water flows through a series of eight fish ladders, approximately 270 feet, to a culvert under a road and from there to the confluence with Fife Ditch.

Period of use:

The period of use for this water right was originally 11/1 to 04/01. This has been changed to year-round. When the right was permitted there was some confusion about whether the pond was on or off stream. The field exam confirmed that the pond is on stream making the year-round period of use appropriate.

Conditions:

A condition listed on the permit for this water right states that the 'Applicant will provide a fish screen at both the inlet and outlet of the pond.' A letter included in the file from the Idaho Department of Fish and Game dated June 28, 1990 addresses fish screens. Fish and Game indicated they would have no objection to IDWR issuing a permit based upon a list of conditions which they laid out in the letter. Condition two states that if Mr. Gattung chose to allow fish to pass through his pond he would have to provide a fish ladder with adequate flows for year-round passage. Condition three specifies that fish screens are required if fish pass around the pond. Water flows through the pond rather than around it and there are no screens at either end of the pond. Mr. Gattung installed a series of 8 sets of concrete blocks downstream for the pond to serve as fish ladders. This exam does not confirm that the fish ladders comply with Fish and Game requirements.

Have conditions of permit approval been met? ____ Yes ____X__ No (see attached memo)

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
RECREATION STORAGE	11/01 to 04/01		15.00 AF
<u>Totals:</u>			15.00 AF

2. Recommended Amendments

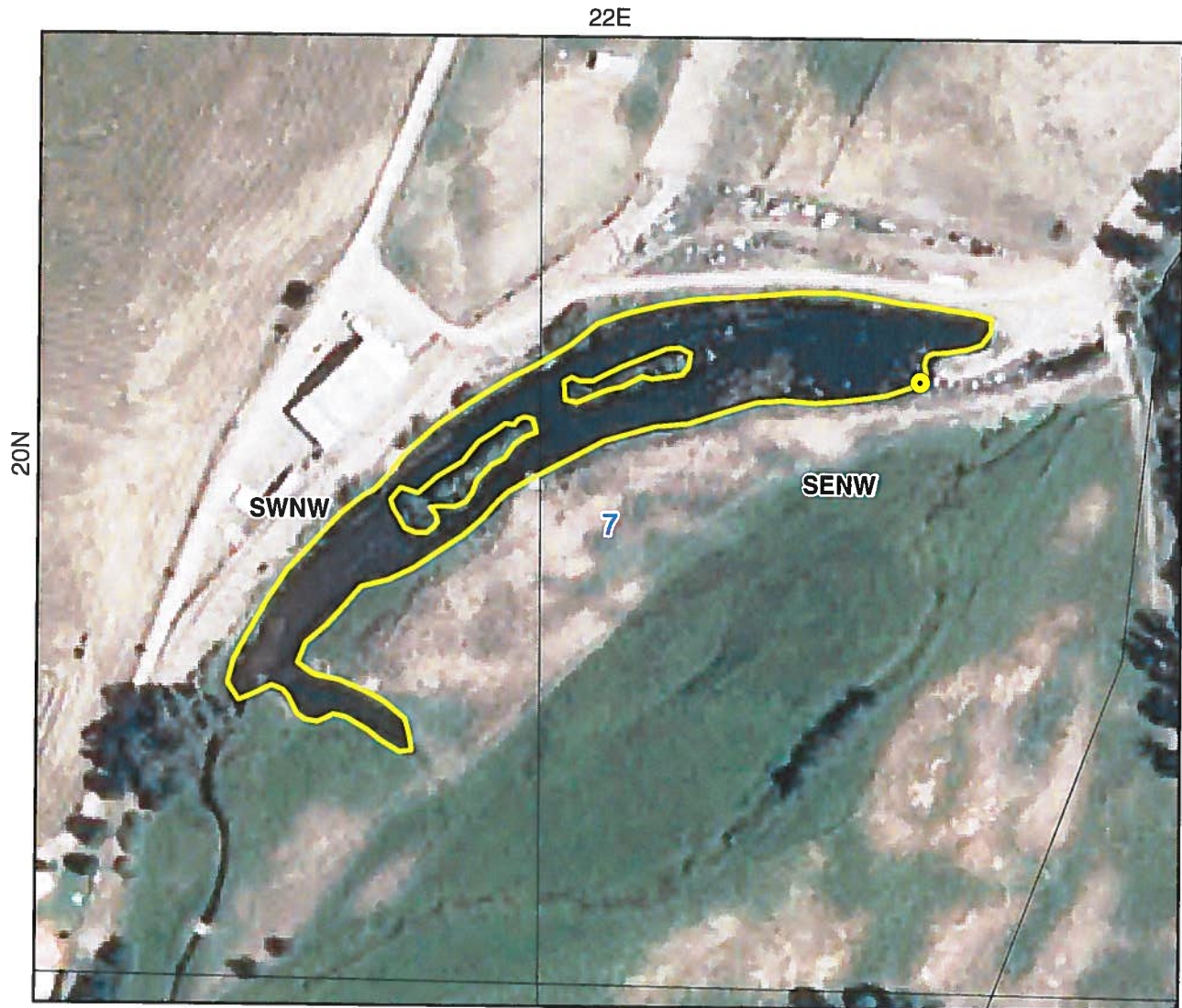
☒ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

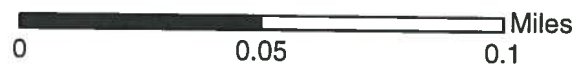
Field Examiner's Name Samuel T. Hall Date 2/25/2013
Reviewer _____ Date _____

State of Idaho
Department of Water Resources
Water Right License
75-7537

This map depicts the RECREATION and RECREATION STORAGE place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

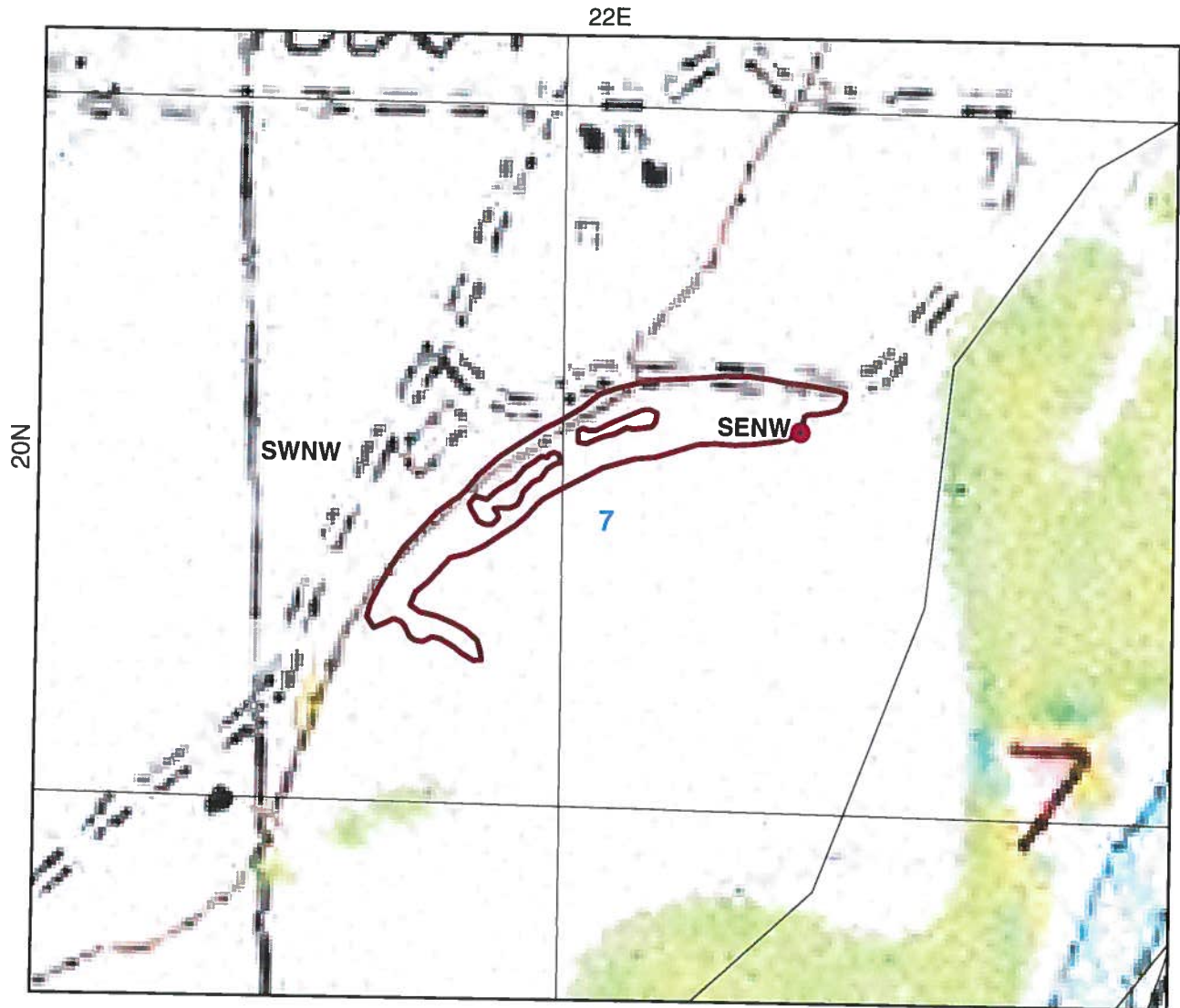


-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters



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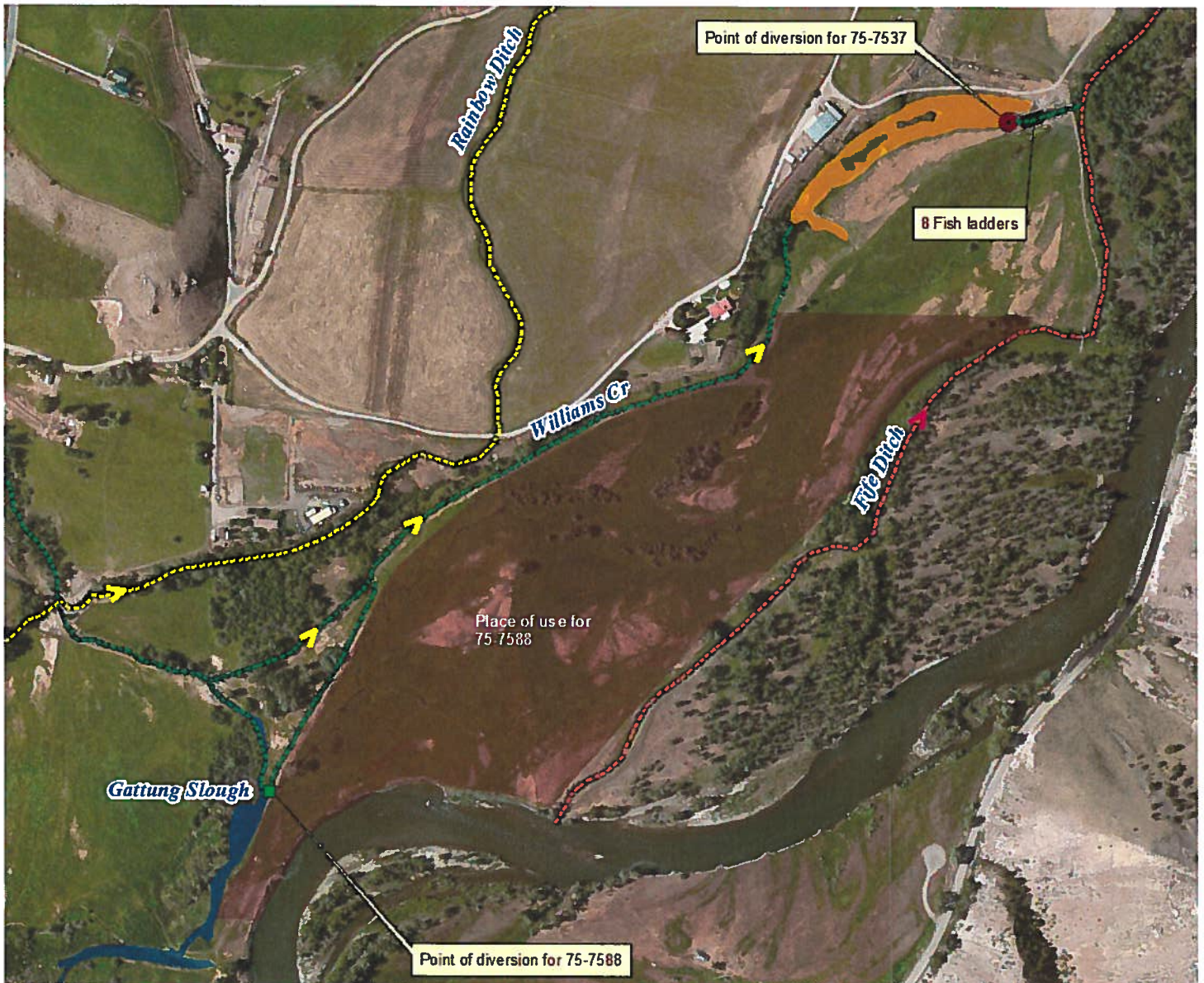


- Point of Diversion
- ▭ Place Of Use Boundary
- ▭ Townships
- ▭ PLS Sections
- ▭ Quarter Quarters



0 0.05 0.1 Miles

Water Distribution System Water Right 75-7537



A 2.4 acre pond provides recreation storage in T20N R21E Section 7 SENW (shown above in orange). Williams Creek flows out of a canyon to the headgate that controls flow for water right 75-7588. Past the headgate water flows .6 of a mile to the upper end of the pond. Below the pond a series of 8 sets of concrete blocks serve as fish ladders. Water flows approximately 270 to a culvert under a road. Below the road Williams Creek flows to the confluence with Fife Ditch. A Flow Tracker measurement taken downstream from the water right 75-7588 headgate showed a flow rate of 3.47 cfs.

Historically both 75-7537 and 75-7588 belonged to Bill Gattung. Currently, they are held by his children.

MEMORANDUM

TO: Water Rights File 75-7537
FROM: Sandra Thiel
DATE: February 25, 2013
SUBJECT: Pond Conditions

The permit for this water right includes the condition that 'use of water under this permit is subject to control by the water master of state water district no. 75-B.' During the development period for this permit the pond on Williams Creek was not within a water district. Williams Creek flows out of a narrow canyon approximately $\frac{3}{4}$ mile upstream from the pond. The canyon is part of water district; however, the area downstream is not. During a phone conversation with Kevin Rice, the water master for 75-B on February 19, 2013, Mr. Rice indicated that he does not regulate water downstream from the canyon.

The conditions also require a measuring device on the pond to ensure that the amount of water entering the pond is the same as the water released. The concrete structure that serves as fish ladders would allow for the installation of a measuring device. There is no measuring device at the upper end of the pond. As of the date of this memo there is no one to regulate the pond. Therefore, I recommend including the condition stating that the right holder shall install an acceptable measuring device after specific notification by the Department.

Precipitation Loss Calculation

Date: February 4, 2013
Prepared by: Sandra Thiel
Water Right No: 75-7537

P = Precipitation
ET= Evapotranspiration
 P_d = Precipitation deficit
 P_d = P- ET

P_d

Found at: <http://www.kimberly.uidaho.edu/ETIdaho/>

P_d = convert to AFA: (mm/yr) / (convert to feet) x # acres =

483		304.8		2.4	
(From ET Idaho)					

$P_d = 3.80$ AFA

* Use the Precipitation Deficit for 'P' value



ET_{Idaho} 2012 -- Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho

Please send suggestions for improving this site to robison at kimberly dot uidaho dot edu Copyright 2012, University of Idaho.

Salmon (NWS -- 108076)

Statistics based on thirty year normal spans 1979 to 2010 years

For a different land cover or crop click on the above link.

You can highlight this table and copy via the clipboard to a Microsoft Excel or OpenOffice spreadsheet to plot or otherwise work with this data.

Open water - shallow systems (ponds, streams)															
Precipitation Deficit (Click here for a graph)															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Growing Season ^a	Non Growing Season ^b	Annual
Mean ^j	mm/day												mm		
Monthly ^c	0.34	0.10	0.99	1.83	2.08	2.64	3.55	3.14	1.72	0.71	0.21	0.45	483	0	483
15-Day Moving Average ^d	0.34	0.02	1.02	1.83	2.10	2.57	3.62	3.14	1.72	0.74	0.20	0.40			
7-Day Moving Average ^e	0.34	0.05	0.99	1.82	2.06	2.60	3.59	3.14	1.69	0.73	0.23	0.42			
3-Day Moving Average ^f	0.34	0.09	0.98	1.83	2.07	2.62	3.56	3.15	1.71	0.71	0.23	0.44			
Standard Deviation ^k	mm/day												mm		
Monthly ^c	0.39	0.34	0.48	0.61	1.23	1.02	1.12	0.95	0.72	0.75	0.44	0.56	76	0	76
15-Day Moving Average ^d	0.43	0.46	0.44	0.82	1.28	1.26	1.06	0.92	1.02	0.66	0.56	0.45			
7-Day Moving Average ^e	0.65	0.61	0.65	1.14	1.76	1.74	1.40	1.19	1.37	1.00	0.80	0.65			
3-Day Moving Average ^f	0.90	0.81	0.98	1.64	2.34	2.37	2.05	1.62	1.87	1.41	1.15	0.97			
20% Exceedance ^l	mm/day												mm		
Monthly ^c	0.07	0.37	1.33	2.31	2.86	3.63	4.21	3.66	2.28	1.14	0.15	0.06	540	0	540
15-Day Moving Average ^d	0.15	0.48	1.78	2.95	3.88	4.40	4.70	4.17	2.87	1.65	0.44	0.11			
7-Day Moving Average ^e	0.23	0.70	2.12	3.52	4.44	4.84	4.97	4.44	3.10	2.02	0.69	0.18			
3-Day Moving	0.29	0.93	2.64	4.10	4.85	5.20	5.31	4.79	3.48	2.10	0.79	0.26			

FILE NUME 75-7537
REVIEWER -----Sandy Thiel
DATE -----25-Feb-12

MAXIMUM DAILY WATER USE FOR DOMESTIC PURPOSES

INPUTS

POND

SURFACE AREA (SQFT) 2.4 acres

SEEPAGE RATE (FT/DA)

SUGGES CONVERT TO GP GPD
0 = NATURALLY FILLED FROM GW, OR LINED
0.5 = CLAY SOILS
1.5 = LOAMS
3.0 = GRAVELS

FORMULA: SA * SEEPAGE LOSS = POND SEEPAGE (CUFT/D)
CONVERSION: 1 CUFT = 7.48 G
NOTE: ASSUMES CONTINUOUS REPLACEMENT RATE

TOTAL Seepage Loss (AFA) ----- TOTAL = FILL RATE + EVAP + SEEPAGE + FLOW THROUGH

PHOTOGRAPHER AND DATE OF PHOTOS: Sandy Thiel, August 8, 2012
FILE NUMBER 75-7537



These photos show the outflow from the pond on Williams Creek

Culvert

There are a series of 8 fish ladders from the outflow to the culvert. Below the culvert Fife Ditch flows into Williams Creek



Williams Creek inflow

Tan shed

Pond outflow



The photo below shows Williams Creek just above the inflow to the pond. The tan shed is visible in this photo and the one above.

